

**CALIFORNIA
FARMLAND CONVERSION
REPORT
1996 - 98**

Prepared by the Staff of the
FARMLAND MAPPING AND MONITORING PROGRAM
California Department of Conservation

JUNE 2000

CHAPTER TWO

SUMMARY AND ANALYSIS

EXPLANATION OF TABLES

An acreage summary for each category for all project counties appears in Tables 1 and 2 for 1996 and 1998, respectively. These tables also indicate the percentage of each county that the FMMP maps. Figures for "Total County Area" in Tables 1 and 2 are derived from a digital county line file developed by the U.S. Bureau of Reclamation and adopted by FMMP during the 1996 update. Areas that are not mapped by the FMMP typically do not have modern soil surveys, are large public land holdings, or do not contain significant cultivated agricultural land uses (e.g., National Forest areas, San Francisco County, Alpine County).

Table 3 presents a summary of all Important Farmland conversions between 1996 and 1998. It is a summation of the individual county tables found in Appendix A. Table 3 does not include land use conversions for the Interim

Farmland Map sections of Butte, Colusa, Kern, and Tulare counties. Table 3 and the individual county land use conversion tables, found in Appendix A, are composed of three components:

Part I lists acreage figures by category and shows gains, losses, and net changes from 1996 to 1998.

Part II lists acreage for cities and counties which elected to report on Land Committed to Nonagricultural Use. Not all project counties reported information for this table, and in some cases, information was reported for only one of the years inventoried. Data for Part II represents a cumulative total of reported acreage minus any acres that have been physically converted.

Part III reports the amount of acreage converted from one land use category to another. Conversion data is determined on a category-to-category basis; eight categories and 56 conversion combinations are reported regarding land use change in areas covered by Important Farmland maps.

**TABLE 1
1996 ACREAGE SUMMARY**

CALIFORNIA DEPARTMENT OF CONSERVATION
Division of Land Resource Protection

COUNTY	IMPORTANT FARMLAND				IMPORTANT FARMLAND SUBTOTAL	GRAZING LAND	AGRICULTURAL LAND SUBTOTAL	URBAN & BUILT-UP LAND	OTHER LAND	WATER AREA	COUNTY AREA INVENTORIED (1)	PERCENT MAPPED	COUNTY AREA NOT INVENTORIED	TOTAL COUNTY AREA
	PRIME	STATEWIDE	UNIQUE	LOCAL										
Alameda	7,567	1,515	1,401	0	10,483	250,380	260,863	138,064	73,882	52,528	525,337	100%	0	525,337
Amador	3,577	1,510	2,751	3,738	11,576	191,327	202,903	7,181	84,968	5,323	300,375	77%	87,450	387,825
Contra Costa	41,093	13,936	6,703	46,661	108,393	174,171	282,564	136,253	43,428	51,774	514,019	100%	0	514,019
El Dorado	1,211	1,055	4,521	81,482	88,269	185,443	273,712	25,355	230,456	6,880	536,403	47%	608,520	1,144,923
Fresno	371,858	143,001	96,008	31,168	642,035	308,350	950,385	89,297	79,635	3,877	1,123,194	29%	2,727,318	3,850,512
Glenn	171,102	89,677	11,698	136,454	408,931	176,310	585,241	5,323	252,586	5,979	849,129	100%	0	849,129
Imperial	200,239	321,730	592	33,031	555,592	0	555,592	23,498	448,494	985	1,028,569	36%	1,839,857	2,868,426
Kern	539,555	113,492	55,691	0	708,738	895,051	1,603,789	75,261	870,578	991	2,550,619	49%	2,670,763	5,221,382
Kings	142,578	433,887	24,772	5,778	607,015	243,778	850,793	27,228	12,720	45	890,786	100%	0	890,786
Lake	17,120	1,415	8,064	18,794	45,393	245,293	290,686	12,666	500,838	46,793	850,983	100%	0	850,983
Los Angeles	24,355	977	871	30,680	56,883	218,002	274,885	155,660	643,502	3,457	1,077,504	43%	1,451,966	2,529,470
Madera	102,531	85,709	156,434	37,002	381,676	401,701	783,377	22,595	49,155	5,918	861,045	63%	516,490	1,377,535
Marin	168	325	124	67,766	68,383	91,924	160,307	39,763	133,977	44,615	378,662	100%	0	378,662
Mariposa	29	98	131	0	258	408,200	408,458	2,162	71,779	6,047	488,446	52%	447,151	935,597
Merced	288,415	159,788	93,580	51,241	593,024	583,709	1,176,733	30,183	37,526	16,978	1,261,420	100%	0	1,261,420
Modoc	73,211	47,672	8,111	100,333	229,327	601,333	830,660	3,467	17,241	56,298	907,666	34%	1,782,015	2,689,681
Monterey	173,238	38,209	13,610	0	225,057	1,078,186	1,303,243	49,231	762,274	6,379	2,121,127	100%	0	2,121,127
Napa	29,519	7,432	15,027	22,142	74,120	186,722	260,842	20,325	202,157	22,535	505,859	100%	0	505,859
Nevada	375	1,013	314	19,888	21,590	130,367	151,957	14,508	122,778	2,145	291,388	47%	332,448	623,836
Orange	13,068	1,225	5,943	0	20,236	38,953	59,189	262,247	187,038	986	509,460	100%	0	509,460
Placer	9,867	5,546	23,301	114,270	152,984	33,694	186,678	35,002	184,804	5,047	411,531	43%	548,559	960,090
Riverside	168,763	55,842	41,320	241,461	507,386	135,507	642,893	231,987	1,001,125	58,611	1,934,616	41%	2,738,479	4,673,095
Sacramento	123,104	74,276	11,369	28,426	237,175	170,710	407,885	146,904	62,833	18,461	636,083	100%	0	636,083
San Benito	35,432	11,588	847	39,045	86,912	592,539	679,451	6,181	202,738	1,019	889,389	100%	0	889,389
San Bernardino	30,722	12,169	4,314	5,258	52,463	954,967	1,007,430	232,605	234,939	1,015	1,475,989	11%	11,391,800	12,867,789
San Diego	11,100	13,902	67,734	105,190	197,926	142,857	340,783	307,169	1,507,356	11,385	2,166,693	80%	545,507	2,712,200
San Joaquin	433,134	98,163	48,759	53,479	633,535	156,185	789,720	69,739	42,905	10,236	912,600	100%	0	912,600
San Luis Obispo	40,208	11,658	26,749	278,987	357,602	662,367	1,019,969	37,054	234,759	10,389	1,302,171	61%	822,036	2,124,207
San Mateo	2,531	177	2,739	4,024	9,471	45,756	55,227	70,158	162,387	65,679	353,451	100%	0	353,451
Santa Barbara	69,532	5,787	25,168	28,160	128,647	597,097	725,744	59,268	250,538	4,264	1,039,814	64%	593,776	1,633,590
Santa Clara	33,871	5,174	1,345	8,806	49,196	404,279	453,475	176,726	196,567	8,457	835,225	100%	0	835,225
Santa Cruz	17,230	3,068	4,203	718	25,219	16,187	41,406	27,719	216,227	357	285,709	100%	0	285,709
Shasta	21,502	4,685	402	10,212	36,801	410,145	446,946	30,014	538,217	6,053	1,021,230	41%	1,443,943	2,465,173
Sierra Valley (2)	3,336	4,071	3,146	75,358	85,911	108,065	193,976	745	2,975	75	197,771	4%	5,111,595	5,309,366
Siskiyou	92,373	30,714	30,618	657,125	810,830	377,765	1,188,595	12,907	59,605	20,185	1,281,292	32%	2,780,933	4,062,225
Solano	150,865	11,498	13,504	0	175,867	202,121	377,988	51,015	101,184	52,182	582,369	100%	0	582,369
Sonoma	34,269	15,684	22,163	96,993	169,109	441,852	610,961	64,067	333,953	17,079	1,026,060	100%	0	1,026,060
Stanislaus	170,048	27,832	49,042	38,140	285,062	116,640	401,702	49,171	21,919	5,450	478,242	49%	491,927	970,169
Sutter	170,171	113,441	23,252	0	306,864	49,478	356,342	10,618	20,718	1,762	389,440	100%	0	389,440
Tehama	77,153	18,651	19,088	131,226	246,118	706,585	952,703	10,758	869,901	6,133	1,839,495	97%	53,405	1,892,900
Tulare	85,497	28,529	6,913	70,543	191,482	446,037	637,519	11,582	151,722	4,629	805,452	26%	2,293,824	3,099,276
Ventura	52,141	37,611	22,437	11,148	123,337	208,752	332,089	92,883	127,041	3,939	555,952	47%	618,021	1,173,973
Yolo	269,149	18,805	59,699	73,118	420,771	143,261	564,032	24,472	57,577	7,371	653,452	100%	0	653,452
Yuba	46,491	11,011	37,845	0	95,347	142,225	237,572	11,110	156,953	6,192	411,827	100%	0	411,827
TOTAL	4,349,298	2,083,548	1,052,303	2,757,845	10,242,994	13,674,271	23,917,265	2,910,121	11,563,955	666,503	39,057,844		41,897,783	80,955,627

COUNTY	INTERIM FARMLAND		INTERIM FARMLAND SUBTOTAL	GRAZING LAND	AGRICULTURAL LAND SUBTOTAL	URBAN & BUILT-UP LAND	OTHER LAND	WATER AREA	COUNTY AREA INVENTORIED (1)	PERCENT MAPPED	COUNTY AREA NOT INVENTORIED	TOTAL COUNTY AREA
	IRRIGATED	NON-IRRIGATED										
Butte	257,708	9,366	267,074	264,589	531,663	38,888	326,405	20,953	917,909	86%	155,344	1,073,253
Colusa	329,347	10,756	340,103	237,871	577,974	4,175	84,565	1,904	668,618	90%	71,775	740,393
Kern	297,727	10,009	307,736	868,822	1,176,558	21,175	1,464,162	8,868	2,670,763	51%	2,550,619	5,221,382
Tulare	649,717	7,408	657,125	10,339	667,464	35,094	77,857	0	780,415	25%	2,318,861	3,099,276
TOTAL	1,534,499	37,539	1,572,038	1,381,621	2,953,659	99,332	1,952,989	31,725	5,037,705		5,096,599	10,134,304

Notes to the Reader:

- "County Area Inventoried" represents those counties and portions of counties mapped by the Farmland Mapping and Monitoring Program.
- Lassen, Plumas, and Sierra counties are included within the tri-county area referred to as "Sierra Valley" in the USDA-NRCS soil survey for that region.

1996 ACREAGE SUMMARY

TABLE 2
1998 ACREAGE SUMMARY

CALIFORNIA DEPARTMENT OF CONSERVATION
Division of Land Resource Protection

COUNTY	IMPORTANT FARMLAND				IMPORTANT FARMLAND SUBTOTAL	GRAZING LAND	AGRICULTURAL LAND SUBTOTAL	URBAN & BUILT-UP LAND	OTHER LAND	WATER AREA	COUNTY AREA INVENTORIED (1)	PERCENT MAPPED	COUNTY AREA NOT INVENTORIED	TOTAL COUNTY AREA
	PRIME	STATEWIDE	UNIQUE	LOCAL										
Alameda	7,560	1,358	1,599	0	10,517	248,354	258,871	139,998	73,940	52,528	525,337	100%	0	525,337
Amador	3,765	1,739	2,773	2,957	11,234	191,370	202,604	7,312	85,136	5,323	300,375	77%	87,450	387,825
Contra Costa	39,587	12,242	6,650	47,835	106,314	173,041	279,355	137,517	43,894	53,253	514,019	100%	0	514,019
El Dorado	1,200	1,043	4,620	81,283	88,146	185,283	273,429	25,690	230,404	6,880	536,403	47%	608,520	1,144,923
Fresno	367,190	141,050	95,217	32,644	636,101	319,814	955,915	93,313	70,075	3,891	1,123,194	29%	2,727,318	3,850,512
Glenn	168,455	88,637	11,075	139,989	408,156	176,297	584,453	5,379	253,281	6,016	849,129	100%	0	849,129
Imperial	199,707	319,372	592	35,218	554,889	0	554,889	23,952	448,743	985	1,028,569	36%	1,839,857	2,868,426
Kern	537,032	112,258	54,097	0	703,387	895,145	1,598,532	79,230	871,866	991	2,550,619	49%	2,670,763	5,221,382
Kings	142,528	429,172	24,496	6,512	602,708	244,174	846,882	28,244	15,594	66	890,786	100%	0	890,786
Lake	16,719	1,408	9,214	18,952	46,293	243,172	289,465	13,453	501,272	46,793	850,983	100%	0	850,983
Los Angeles	24,632	991	933	30,736	57,292	218,118	275,410	159,533	639,104	3,457	1,077,504	43%	1,451,966	2,529,470
Madera	102,125	85,397	160,891	30,576	378,989	399,229	778,218	22,242	54,667	5,918	861,045	63%	516,490	1,377,535
Marin	168	312	26	66,969	67,475	91,848	159,323	40,240	134,424	44,675	378,662	100%	0	378,662
Mariposa	29	98	131	0	258	408,330	408,588	2,226	71,585	6,047	488,446	52%	447,151	935,597
Merced	289,057	160,066	96,593	47,929	593,645	580,934	1,174,579	30,559	39,304	16,978	1,261,420	100%	0	1,261,420
Modoc	73,218	47,677	8,252	100,333	229,480	601,255	830,735	3,467	17,166	56,298	907,666	34%	1,782,015	2,689,681
Monterey	170,766	38,713	15,239	0	224,718	1,076,031	1,300,749	50,031	764,102	6,245	2,121,127	100%	0	2,121,127
Napa	29,936	8,063	15,752	20,653	74,404	185,643	260,047	20,599	202,677	22,535	505,859	100%	0	505,859
Nevada	375	988	304	20,279	21,946	129,889	151,835	14,647	122,761	2,145	291,388	47%	332,448	623,836
Orange	11,099	842	6,259	0	18,200	38,517	56,717	269,987	181,770	986	509,460	100%	0	509,460
Placer	9,750	5,196	22,726	114,453	152,125	31,695	183,820	37,609	185,055	5,047	411,531	43%	548,559	960,090
Riverside	159,462	53,766	41,674	246,838	501,740	134,597	636,337	240,889	1,000,442	56,948	1,934,616	41%	2,738,479	4,673,095
Sacramento	121,974	67,713	13,521	33,732	236,940	165,253	402,193	150,716	64,922	18,252	636,083	100%	0	636,083
San Benito	34,278	9,766	902	39,381	84,327	593,629	677,956	6,749	203,665	1,019	889,389	100%	0	889,389
San Bernardino	29,975	12,027	3,889	5,036	50,927	954,229	1,005,156	234,981	234,837	1,015	1,475,989	11%	11,391,800	12,867,789
San Diego	10,660	13,617	67,535	105,001	196,813	142,335	339,148	311,491	1,504,625	11,429	2,166,693	80%	545,507	2,712,200
San Joaquin	429,168	96,795	52,715	53,682	632,360	152,699	785,059	71,596	44,297	11,648	912,600	100%	0	912,600
San Luis Obispo	39,892	13,912	30,096	273,888	357,788	661,921	1,019,709	37,183	234,890	10,389	1,302,171	61%	822,036	2,124,207
San Mateo	2,644	177	2,963	3,933	9,717	45,751	55,468	70,831	161,417	65,735	353,451	100%	0	353,451
Santa Barbara	72,115	6,764	29,327	26,199	134,405	589,640	724,045	59,532	251,973	4,264	1,039,814	64%	593,776	1,633,590
Santa Clara	32,009	4,901	1,413	8,687	47,010	390,677	437,687	179,481	209,600	8,457	835,225	100%	0	835,225
Santa Cruz	17,179	3,057	4,393	869	25,498	16,718	42,216	28,588	214,548	357	285,709	100%	0	285,709
Shasta	20,207	4,581	358	10,173	35,319	409,838	445,157	31,196	538,824	6,053	1,021,230	41%	1,443,943	2,465,173
Sierra Valley (2)	9,692	4,671	2,644	91,832	108,839	80,706	189,545	745	7,406	75	197,771	4%	5,111,595	5,309,366
Siskiyou	92,802	30,619	34,151	653,253	810,825	376,936	1,187,761	12,985	60,361	20,185	1,281,292	32%	2,780,933	4,062,225
Solano	150,356	11,086	13,970	0	175,412	199,271	374,683	53,130	102,374	52,182	582,369	100%	0	582,369
Sonoma	35,687	16,778	25,037	92,867	170,369	438,636	609,005	66,178	333,663	17,214	1,026,060	100%	0	1,026,060
Stanislaus	166,560	27,398	48,995	37,653	280,606	116,644	397,250	50,481	24,970	5,541	478,242	49%	491,927	970,169
Sutter	170,229	113,680	22,235	0	306,144	49,821	355,965	10,669	21,044	1,762	389,440	100%	0	389,440
Tehama	77,603	19,436	19,492	129,700	246,231	706,332	952,563	10,792	870,007	6,133	1,839,495	97%	53,405	1,892,900
Tulare	84,979	28,467	7,228	70,730	191,404	445,133	636,537	11,929	152,357	4,629	805,452	26%	2,293,824	3,099,276
Ventura	51,817	37,698	22,644	11,076	123,235	207,853	331,088	95,522	125,403	3,939	555,952	47%	618,021	1,173,973
Yolo	265,916	18,204	55,245	74,301	413,666	143,384	557,050	25,586	63,445	7,371	653,452	100%	0	653,452
Yuba	45,784	11,042	36,930	0	93,756	143,223	236,979	11,179	157,477	6,192	411,827	100%	0	411,827
TOTAL	4,315,886	2,062,777	1,074,796	2,766,149	10,219,608	13,603,365	23,822,973	2,977,657	11,589,368	667,846	39,057,844		41,897,783	80,955,627

COUNTY	INTERIM FARMLAND		INTERIM FARMLAND SUBTOTAL	GRAZING LAND	AGRICULTURAL LAND SUBTOTAL	URBAN & BUILT-UP LAND	OTHER LAND	WATER AREA	COUNTY AREA INVENTORIED (1)	PERCENT MAPPED	COUNTY AREA NOT INVENTORIED	TOTAL COUNTY AREA
	IRRIGATED	NON-IRRIGATED										
Butte	255,245	9,476	264,721	264,778	529,499	39,243	328,214	20,953	917,909	86%	155,344	1,073,253
Colusa	329,049	11,496	340,545	234,874	575,419	4,293	87,002	1,904	668,618	90%	71,775	740,393
Kern	295,972	6,389	302,361	872,449	1,174,810	21,549	1,465,536	8,868	2,670,763	51%	2,550,619	5,221,382
Tulare	645,450	8,145	653,595	10,318	663,913	36,596	79,906	0	780,415	25%	2,318,861	3,099,276
TOTAL	1,525,716	35,506	1,561,222	1,382,419	2,943,641	101,681	1,960,658	31,725	5,037,705		5,096,599	10,134,304

Notes to the Reader:

- "County Area Inventoried" represents those counties and portions of counties as mapped by the Farmland Mapping and Monitoring Program.
- Lassen, Plumas, and Sierra counties are included within the tri-county area referred to as "Sierra Valley" in the USDA-NRCS soil survey for that region.

1998 ACREAGE SUMMARY

ASSUMPTIONS IN ANALYSES

The analyses of conversion data in this chapter are compiled from Part III of all tables in Appendix A. This includes the Interim farmland portions of Butte, Colusa, Kern, and Tulare counties. The integration of Important and Interim Farmland figures in the project-wide and regional analyses result in larger conversion numbers than can be seen in Table 3 alone. The figures can be seen by region in the Regional Conversion Summary (Appendix B).

To facilitate general analyses, grouping of Important and Interim Farmland categories has been conducted and certain simplifying assumptions have been made. For example, Unique Farmland is considered to be an irrigated farmland category in these analyses, even though a small proportion of land within the Unique Farmland category supports high value nonirrigated crops, such as some coastal vineyards.

Conversely, Farmland of Local Importance is considered to be a nonirrigated category although it also supports some irrigated pastures on non-Prime and non-Statewide Importance soils.

STATISTICAL NOTES

Residual Polygons

The minimum-mapping unit for all farmland categories, Other Land, and Urban and Built-Up Land is 10 acres. For Grazing Land and Water the minimum mapping unit is 40 acres. Small residual polygons less than the minimum-mapping unit are sometimes created during the map updating process. These residual polygons are too small to be shown on the Important and Interim Farmland maps and are therefore combined with the most appropriate adjacent land use type on the map. These changes are statistically tabulated during computer processing and are reported as small conversions in the final land use conversion tables.

TABLE 3
LAND USE CONVERSION SUMMARY
1996-1998 Land Use Conversion

CALIFORNIA DEPARTMENT OF CONSERVATION
Division of Land Resource Protection

Farmland Mapping and Monitoring Program

PART I
Land Use Totals and Net Changes

LAND USE CATEGORY	TOTAL ACREAGE INVENTORIED		1996-98 ACREAGE CHANGES			
			ACRES LOST	ACRES GAINED	TOTAL ACREAGE CHANGED	NET ACREAGE CHANGED
	1996	1998	(-)	(+)		
Prime Farmland (1)	4,349,298	4,315,886	99,479	66,067	165,546	-33,412
Farmland of Statewide Importance (1)	2,083,548	2,062,777	56,310	35,539	91,849	-20,771
Unique Farmland (1)	1,052,303	1,074,796	46,614	69,107	115,721	22,493
Farmland of Local Importance	2,757,845	2,766,149	84,794	93,098	177,892	8,304
IMPORTANT FARMLAND SUBTOTAL	10,242,994	10,219,608	287,197	263,811	551,008	-23,386
Grazing Land	13,674,271	13,603,365	133,085	62,179	195,264	-70,906
AGRICULTURAL LAND SUBTOTAL	23,917,265	23,822,973	420,282	325,990	746,272	-94,292
Urban and Built-Up Land	2,910,121	2,977,657	19,362	86,898	106,260	67,536
Other Land	11,563,955	11,589,368	87,102	112,515	199,617	25,413
Water Area	666,503	667,846	2,767	4,110	6,877	1,343
TOTAL AREA INVENTORIED (2)	39,057,844	39,057,844	529,513	529,513	1,059,026	0

PART II
Land Committed to Nonagricultural Use

LAND USE CATEGORY	TOTAL ACREAGE 1998
Prime Farmland	29,764
Farmland of Statewide Importance	6,785
Unique Farmland	5,454
Farmland of Local Importance	37,406
IMPORTANT FARMLAND SUBTOTAL	79,409
Grazing Land	73,142
AGRICULTURAL LAND SUBTOTAL	152,551
Urban and Built-Up Land	0
Other Land	50,655
Water Area	0
TOTAL ACREAGE REPORTED	203,206

PART III Land Use Conversion from 1996 to 1998

LAND USE CATEGORY	Prime Farmland	Farmland of Statewide Importance	Unique Farmland	Farmland of Local Importance	Subtotal Important Farmland	Grazing Land	Total Agricultural Land	Urban and Built-Up Land	Other Land	Water Area	Total Converted To Another Use
Prime Farmland (1) to:	--	5,492	5,604	28,045	39,141	13,580	52,721	19,449	26,684	625	99,479
Farmland of Statewide Importance (1) to:	4,938	--	3,521	20,138	28,597	8,177	36,774	5,485	14,023	28	56,310
Unique Farmland (1) to:	6,562	3,046	--	7,929	17,537	10,872	28,409	2,244	15,961	0	46,614
Farmland of Local Importance to:	20,989	11,265	22,301	--	54,555	10,199	64,754	8,445	9,853	1,742	84,794
IMPORTANT FARMLAND SUBTOTAL	32,489	19,803	31,426	56,112	139,830	42,828	182,658	35,623	66,521	2,395	287,197
Grazing Land to:	14,817	7,642	25,964	31,137	79,560	--	79,560	16,785	36,597	143	133,085
AGRICULTURAL LAND SUBTOTAL	47,306	27,445	57,390	87,249	219,390	42,828	262,218	52,408	103,118	2,538	420,282
Urban and Built-Up Land to:	4,022	1,852	961	1,315	8,150	2,480	10,630	--	8,661	71	19,362
Other Land to:	14,306	6,238	10,756	3,377	34,677	16,870	51,547	34,054	--	1,501	87,102
Water Area to:	433	4	0	1,157	1,594	1	1,595	436	736	--	2,767
TOTAL ACREAGE CONVERTED	66,067	35,539	69,107	93,098	263,811	62,179	325,990	86,898	112,515	4,110	529,513

Notes to the Reader:

- (1) Figures for "Net Acreage Changed" in Part I and for conversions between the Prime Farmland, Farmland of Statewide Importance, and Unique Farmland categories in Part III, are partially due to technical revisions to the lists of soils qualifying for Prime Farmland and Farmland of Statewide Importance. See text for further details.
- (2) This table includes acreage data for 45 counties. Conversion data for counties mapped using Interim Farmland categories (Butte, Colusa, portions of Kern and Tulare counties) are not included.

LAND USE CONVERSION SUMMARY

PROJECT-WIDE CONVERSION SUMMARY

The rate of urbanization in the FMMP project area increased 25 percent between the 1996 and 1998 update cycle. During the 1998 inventory there were 69,885 acres of new Urban Land, compared to 55,859 acres in 1996. Urbanization increased in all categories of land use mapped by the FMMP (Figure 6). Urbanization of irrigated farmland categories increased from 17,385 acres in 1996, to 21,664 acres in 1998.

Aside from urbanization, irrigated farmland conversion occurred due to development of low density residential ranchettes, new or expanded confined livestock facilities, wetland and wildlife habitat set-asides, mining activity and land lying idle for three update cycles (approximately six years).

There was a net decrease of 40,473 acres of irrigated farmland during the 1998 inventory, compared with 65,827 acres lost in the previous update period (Figure 7). This "net loss" represents a 0.45 percent decline from 9.02 million irrigated acres mapped in 1996 to 8.98 million acres in 1998.

Net losses from Prime Farmland and Farmland of Statewide Importance totaled 54,183 acres. Proportionally, 62 percent of this loss was from Prime Farmland (33,412 acres), and 38 percent (20,771 acres) was from Farmland of Statewide Importance. These losses were offset to some degree by a net gain of 22,493 acres of irrigated farmland on lesser quality soils (Unique Farmland).

Nearly one-third of the gross loss of Prime Farmland was conversion to Farmland of Local Importance, primarily because the land had been left idle or used for dryland farming for three update cycles. This land could also be left idle in areas adjacent to existing Urban Land in anticipation of new development.

Additional reasons why Prime Farmland had been left idle were market or water supply issues, drainage and salinity problems, or other economic issues. Tracking idle land minimizes the effects of crop rotation cycles that leave the land fallow for a number of seasons. Should any of this land become irrigated in the future, it will be shown as a conversion to irrigated farmland.

Figure 5.
Project-wide Land Use in 1998
(acres)

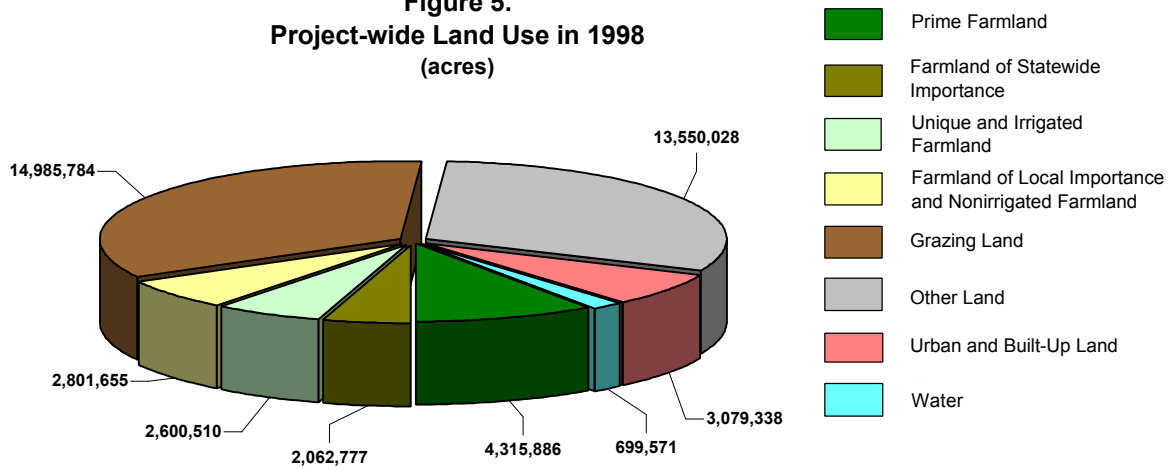


Figure 6.
Net Sources of New Urban and Built-Up Land
1996 and 1998

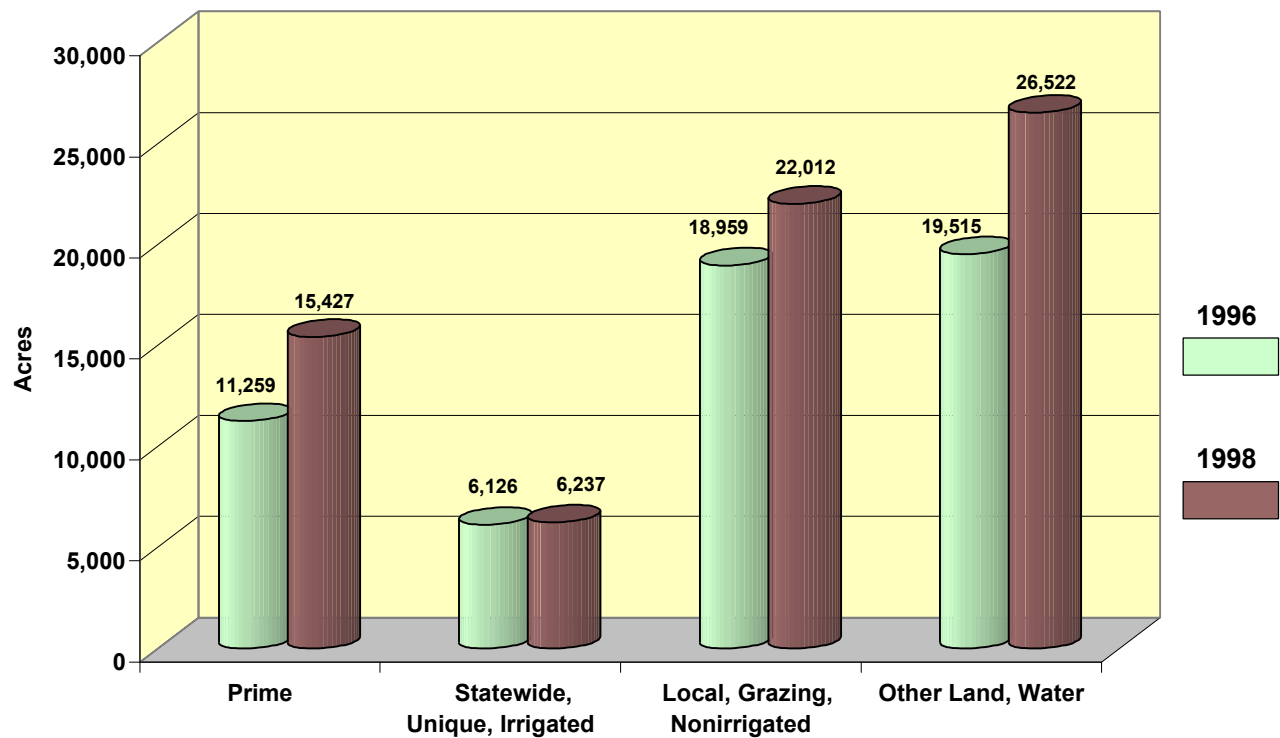
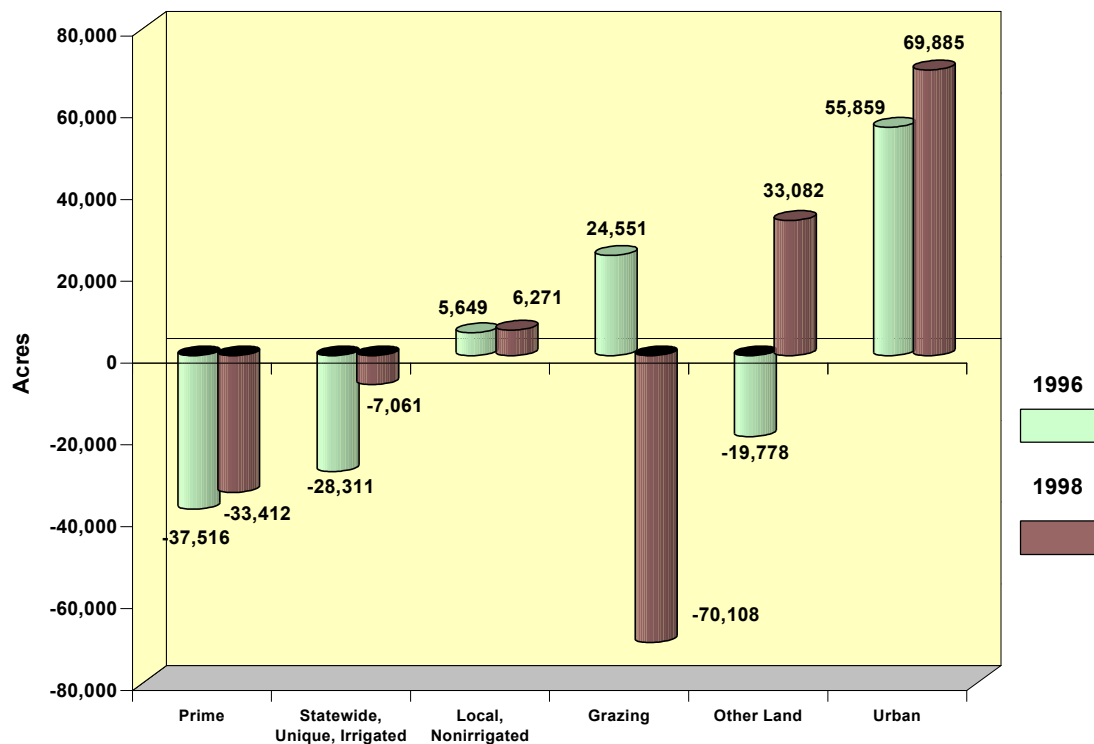


Figure 7.
Net Change in Mapping Categories
1996 and 1998



Conversions from Grazing Land during the 1998 inventory totaled 70,108 acres. Much of the conversion was to irrigated and nonirrigated farmland expansion, but substantial amounts of Grazing Land were also converted to rural ranchette development, as well as to recreational use and habitat preserves.

REGIONAL CONVERSION SUMMARY AND RANKING

The FMMP project counties were aggregated into eight regions (Figure 8) based on climate and geography, in order to examine the relative amount of change in different parts of the state. The most important types of conversion were summarized for each region

and are shown in Appendix B. Regional rankings of Appendix B data are shown in Tables 4 and 5.

The Southern California Region continues to be the most active in terms of overall urbanization, with a net increase of 30,306 acres (43 percent) of new Urban Land (Table 4). About 22 percent of new Urban Land in this region was developed on irrigated farmland, with the remainder coming from areas of native vegetation, dryland farming, and grazing. This Region had a loss of 17,864 acres of irrigated farmland during the 1998 update period (Table 5), down somewhat from the 19,836 acres of irrigated land lost in 1996.

The San Joaquin Valley Region, although second in overall

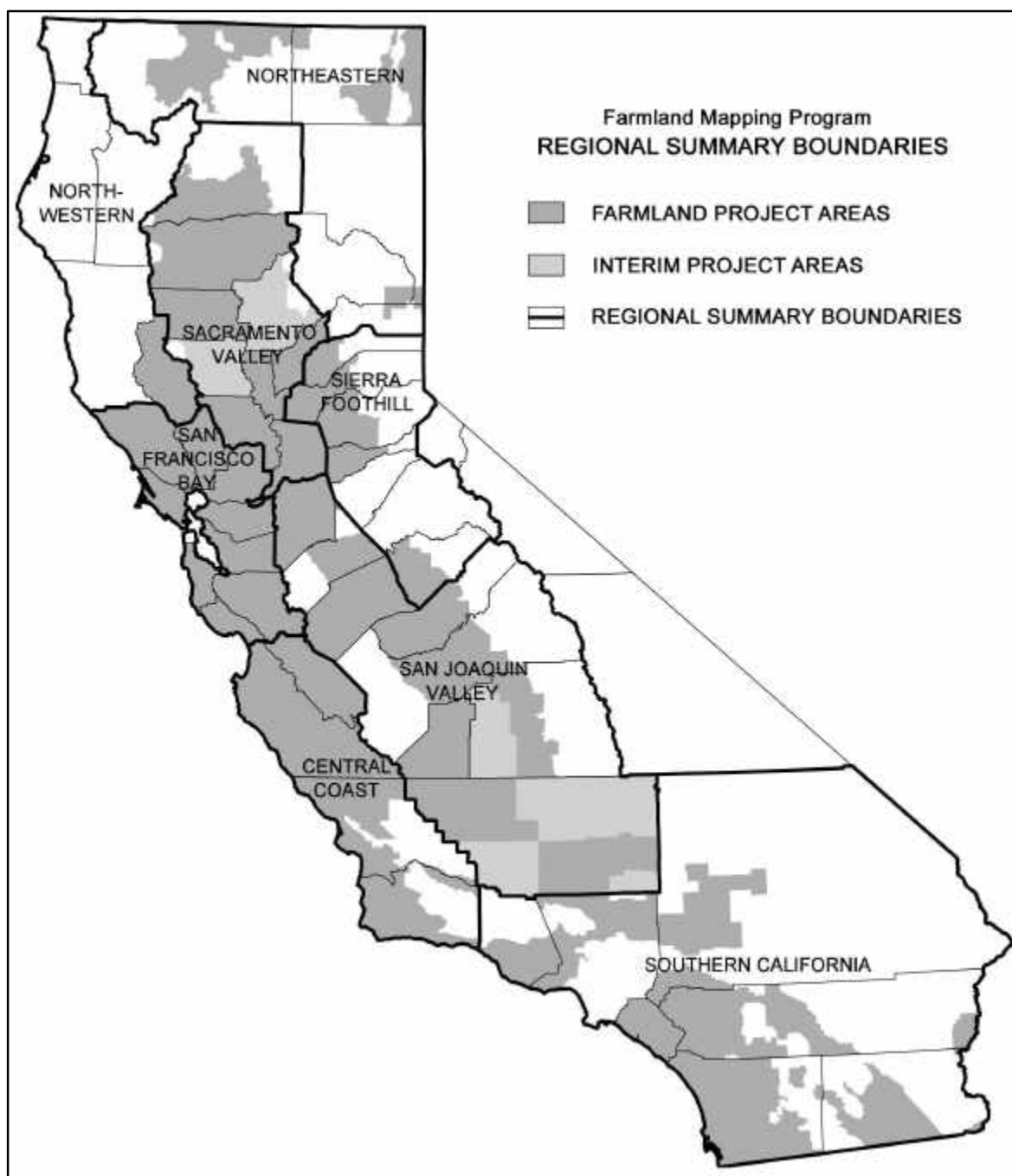


Figure 8. California Regions

TABLE 4
NET SOURCES OF NEW URBAN LAND
(compiled from Appendix B regional data)

TYPE OF CONVERSION	1994-1996		1996-1998	
	RANK	ACRES	RANK	ACRES
NEW URBAN FROM ALL CATEGORIES	1. Southern California	22,494	1. Southern California	30,306
	2. San Joaquin Valley	11,996	2. San Joaquin Valley	14,414
	3. San Francisco Bay	8,217	3. San Francisco Bay	12,472
	4. Sacramento Valley	4,895	4. Sacramento Valley	6,791
	6. Sierra Foothill	3,570	5. Sierra Foothill	3,276
	5. Central Coast	4,703	6. Central Coast	1,761
	N/A Northwestern	N/A	7. Northwestern	787
	7. Northeastern	21	8. Northeastern	78
	Regional Totals	55,896	Regional Totals	69,885
NEW URBAN FROM IRRIGATED CATEGORIES	1. San Joaquin Valley	7,919	1. San Joaquin Valley	9,505
	2. Southern California	4,632	2. Southern California	6,817
	4. San Francisco Bay	1,628	3. San Francisco Bay	1,970
	5. Sacramento Valley	1,320	4. Sacramento Valley	1,812
	3. Central Coast	1,763	5. Central Coast	1,449
	6. Sierra Foothill	123	6. Sierra Foothill	77
	7. Northeastern	0	7. Northeastern	35
	N/A Northwestern	N/A	8. Northwestern	-1
	Regional Totals	17,385	Regional Totals	21,664
NEW URBAN FROM NON-IRRIGATED CATEGORIES	1. Southern California	17,862	1. Southern California	23,489
	2. San Francisco Bay	6,589	2. San Francisco Bay	10,502
	4. Sacramento Valley	3,574	3. Sacramento Valley	4,979
	3. San Joaquin Valley	4,041	4. San Joaquin Valley	4,909
	5. Sierra Foothill	3,447	5. Sierra Foothill	3,199
	N/A Northwestern	N/A	6. Northwestern	788
	6. Central Coast	2,940	7. Central Coast	312
	7. Northeastern	21	8. Northeastern	43
	Regional Totals	38,474	Regional Totals	48,221

Notes to Reader:

FMMP project counties are grouped into regions as shown in Figure 4. Total mapped acreages are listed below. Information not included for newly mapped areas of Siskiyou and Modoc counties and for Lake County.

Southern California	8,748,783	Sierra Foothill	2,028,143
San Joaquin Valley	12,334,536	Sacramento Valley	7,387,183
Central Coast	5,352,501	Northwestern	850,983
San Francisco Bay	5,006,691	Northeastern	2,386,729

Irrigated categories include Prime Farmland, Farmland of Statewide Importance, and Unique Farmland on Important Farmland maps; and Irrigated Farmland on Interim Farmland maps.

Nonirrigated categories include Grazing Land, Other Land, and Farmland of Local Importance on Important Farmland maps; and Grazing Land, Other Land, and Nonirrigated Farmland on Interim Farmland maps.

TABLE 5
CHANGES AFFECTING IRRIGATED FARMLAND

(compiled from Appendix B regional data)

TYPE OF CONVERSION	1994-1996		1996-1998	
	RANK	ACRES	RANK	ACRES
NEW IRRIGATED FARMLAND	1. San Joaquin Valley	18,474	1. San Joaquin Valley	67,327
	3. Central Coast	8,520	2. Central Coast	27,871
	2. Sacramento Valley	17,472	3. Sacramento Valley	16,638
	4. Northeastern	6,043	4. Northeastern	12,205
	6. San Francisco Bay	2,788	5. San Francisco Bay	12,074
	5. Southern California	4,905	6. Southern California	11,093
	NA Northwestern	NA	7. Northwestern	2,246
	7. Sierra Foothill	1,217	8. Sierra Foothill	1,306
	Regional Totals	59,419	Regional Totals	150,760
IRRIGATED FARMLAND LOSSES TO OTHER LAND	1. San Joaquin Valley	14,259	1. San Joaquin Valley	41,187
	2. Sacramento Valley	5,834	2. Sacramento Valley	12,732
	4. Central Coast	2,131	3. Central Coast	6,396
	3. Southern California	5,275	4. Southern California	4,504
	5. San Francisco Bay	571	5. San Francisco Bay	2,698
	NA Northwestern	NA	6. Northwestern	692
	6. Sierra Foothill	404	7. Sierra Foothill	331
	7. Northeastern	4	8. Northeastern	194
	Regional Totals	28,478	Regional Totals	68,734
DOWNGRADES FROM IRRIGATED TO LOCAL, NONIRRIGATED, AND GRAZING	1. San Joaquin Valley	38,933	1. San Joaquin Valley	32,716
	2. Sacramento Valley	15,004	2. Sacramento Valley	24,873
	3. Southern California	14,606	3. Southern California	17,015
	4. Central Coast	5,580	4. Central Coast	9,571
	5. San Francisco Bay	2,515	5. San Francisco Bay	5,485
	7. Northeastern	530	6. Northeastern	1,493
	6. Sierra Foothill	1,618	7. Sierra Foothill	1,456
	NA Northwestern	NA	8. Northwestern	750
	Regional Totals	78,786	Regional Totals	93,359
REGIONS WITH "NET LOSSES" OF IRRIGATED FARMLAND	3. Sacramento Valley	-4,745	1. Sacramento Valley	-23,015
	1. San Joaquin Valley	-42,858	2. San Joaquin Valley	-21,764
	2. Southern California	-19,836	3. Southern California	-17,864
	6. Sierra Foothill	-929	4. Sierra Foothill	-562
REGIONS WITH "NET INCREASES" OF IRRIGATED FARMLAND	1. Northeastern	5,509	1. Northeastern	10,474
	NA Central Coast	-980	2. Central Coast	9,744
	NA San Francisco Bay	-1,988	3. San Francisco Bay	1,772
	NA Northwestern	NA	4. Northwestern	742
"NET CHANGE" IN IRRIGATED FARMLAND	Projectwide Totals	-65,827	Projectwide Totals	-40,473

urbanization, ranked first in conversion of irrigated farmland to Urban Land. A total of 9,505 acres of new Urban Land occurred on irrigated farmland in this region, which is an increase from the 7,919 acres reported in 1996. The Southern California Region ranked second in the conversion of irrigated farmland to Urban Land, with 6,817 acres, which was up from the 4,632 acres of irrigated land converted to Urban Land in 1996.

The Sacramento Valley Region led the state with a 23,015-acre overall loss of irrigated farmland. This loss was substantially more than the 4,745 acres lost during the 1996 update. Much of the loss was due to land left idle for three update cycles, ranchette development and the establishment of wetland and wildlife areas. New urban development accounted for 8 percent of the irrigated farmland loss.

The San Francisco Bay Region accounted for 12,472 acres of new Urban Land, third in overall urbanization. Its growth rate was up from the 8,217 acres reported for the previous update cycle. About 16 percent of the new Urban Land in the region occurred on irrigated farmland.

The four remaining regions of the state- Central Coast, Northeastern, Northwestern and Sierra Foothill- accounted for 7 percent (1,560 acres) of all new urban conversion from irrigated farmland. Most of this growth was accounted for in

the Sierra Foothill Region (3,276 acres), which had about the same growth rate as in the prior reporting period (3,570 acres). The Central Coast Region experienced a reduction in the urbanization rate with 1,761 acres in 1998 versus 4,703 acres in 1996.

The counties of the Northeastern Region showed only a modest increase in new Urban Land in the current reporting period with 78 acres, compared to only 21 acres in 1996. The current report is the first time conversion data has been gathered for the Northwestern Region. Lake County, the sole county in the region, showed an urban increase of 787 acres.

This reporting period saw four regions with a net increase in irrigated land. The Northeastern Region gained 10,474 new acres of irrigated land, primarily in the Sierra Valley where pasture and alfalfa were identified as being flood irrigated during the spring months. The Central Coast showed an increase of 9,744 acres of newly irrigated land, primarily due to new vineyards. The San Francisco Bay and Northwestern regions also had increases in irrigated land, with 1,772 and 742 acres respectively.

COUNTY CONVERSION SUMMARY AND RANKING

The counties leading the state in urbanization of irrigated land were in the Southern California and San Joaquin Valley Regions (Table 6). Riverside County led the state in having the most irrigated farmland

TABLE 6
COUNTY CONVERSION RANKING

(compiled from Appendix A county acreage data)

TYPE OF CONVERSION	1994-96		1996-98	
	RANK	ACRES	RANK	ACRES
MOST IRRIGATED FARMLAND TO URBAN (1)	3. Riverside 1. Fresno 20. Orange 2. San Joaquin 7. Kern 4. Tulare 9. Stanislaus 10. Kings 5. Monterey 18. Santa Clara	1,585 2,071 239 1,803 963 1,223 760 623 1,214 306	1. Riverside 2. Fresno 3. Orange 4. San Joaquin 5. Kern 6. Tulare 7. Stanislaus 8. Kings 9. Monterey 10. Santa Clara	2,335 2,269 1,951 1,402 1,386 1,383 1,195 1,075 1,049 910
TOP 10 URBANIZING COUNTIES FROM ALL CATEGORIES (1)	1. Riverside 12. Orange 8. Kern 2. San Diego 4. Fresno 16. Los Angeles 5. Sacramento 25. Santa Clara 13. Ventura 7. Placer	6,273 1,896 2,397 5,584 3,148 1,191 2,534 651 1,542 2,431	1. Riverside 2. Orange 3. Kern 4. San Diego 5. Fresno 6. Los Angeles 7. Sacramento 8. Santa Clara 9. Ventura 10. Placer	8,902 7,740 4,343 4,322 4,016 3,873 3,812 2,755 2,639 2,607
LARGEST "NET LOSSES" OF IRRIGATED FARMLAND	3. Riverside 12. Yolo 4. Fresno 1. Kern 10. Sacramento 2. Kings 5. Tulare 13. Glenn 18. Stanislaus 11. Contra Costa	-12,212 -1,689 -4,173 -17,143 -2,113 -13,290 -3,866 -1,599 -881 -2,057	1. Riverside 2. Yolo 3. Fresno 4. Kern 5. Sacramento 6. Kings 7. Tulare 8. Glenn 9. Stanislaus 10. Contra Costa	-11,023 -8,288 -7,410 -7,106 -5,541 -5,041 -4,532 -4,310 -3,969 -3,253
LARGEST "NET INCREASES" OF IRRIGATED FARMLAND	5. Santa Barbara 13. Sierra Valley 9. Sonoma NA San Luis Obispo NA Merced NA Siskiyou NA Madera 6. Napa 2. Tehama NA Lake	425 111 230 none none none none 396 2,403 NA	1. Santa Barbara 2. Sierra Valley 3. Sonoma 4. San Luis Obispo 5. Merced 6. Siskiyou 7. Madera 8. Napa 9. Tehama 10. Lake	7,719 6,454 5,386 5,285 3,933 3,867 3,739 1,773 1,639 742

(1) Numbers shown are net acres.

converted to Urban Land with 2,335 acres, followed by Fresno County (2,269 acres), and Orange County (1,951 acres).

Southern California counties led the list of the top 10 urbanizing counties during the 1998 inventory. Riverside County led all other counties with 8,902 new urban acres, up from 6,273 acres reported from 1996. Riverside's growth was primarily due to new subdivisions and golf courses around the cities of Corona, San Jacinto, and Perris, and in the Coachella Valley area. Riverside County was also the leader in net losses of irrigated land, with 11,023 acres going out of production.

Orange County experienced substantial urban growth during the current reporting period, showing 7,740 acres of new development, compared to 1,896 in 1996. Much of Orange County's new growth surrounded the cities of Anaheim, Los Alamitos, Orange and Tustin. New subdivisions, business parks and expansions at U.C. Irvine accounted for much of the growth. San Diego gained 4,322 acres of new Urban Land, primarily through new housing, industrial, commercial development, and golf courses around San Luis Rey, Valley Center, Encinitas, Rancho Santa Fe, Del Mar and Poway.

In the San Joaquin Valley, Kern and Fresno counties showed a combined Urban Land increase of 8,359 acres. This was up from the 5,545 acres reported from 1996. New development was

concentrated around Bakersfield and Oildale in Kern County, where new housing, schools and a wastewater treatment plant have been built. In Fresno County, the cities of Fresno and Clovis and the Highway 99 corridor saw new housing, agricultural processing plants and a new shopping center.

Sacramento County experienced an increase of 3,812 new acres of Urban Land. The primary areas of growth were around the cities of Elk Grove and Folsom. New housing, shopping centers and golf courses were the primary developments.

In the San Francisco Bay area, Santa Clara County had 2,755 new urban acres. New housing, strip malls and office parks were found around the cities of Milpitas, Morgan Hill and Gilroy, and infill within the City of San Jose.

Placer County was the leading area of new urban growth in the Sierra Foothill Region, with 2,607 acres. Roseville, Stanford Ranch, Granite Bay and Lincoln grew to include housing, commercial development, four golf courses and expansion of landfills.

The counties with the greatest net loss of irrigated farmland were Riverside, Yolo, Fresno and Kern. In addition to new housing developments, much of the farmland converted in these counties was due to land lying fallow for three update cycles (six years). The Central Valley had eight of the top ten counties with

the largest losses of irrigated farmland.

Santa Barbara County and the Sierra Valley led the state with net gains in irrigated farmland. Santa Barbara's gain of 7,719 acres was due largely to new vineyard development, but the Santa Maria area saw gains in strawberries and row crops as well. The Sierra Valley's gain of 6,454 acres was due to newly identified irrigated pasture and alfalfa.

LAND COMMITTED TO NONAGRICULTURAL USE

Counties and cities may voluntarily submit documentation to FMMP on Land Committed to Nonagricultural Use. This information is then made available as an overlay to the existing land use data. To date, jurisdictions in 39 of the 48 project counties have submitted information for this category. Because the information is voluntarily submitted, includes areas that will change over a long time period, and includes both low-

and high-density developments, Committed Land can only be seen as a general indication of expected urbanization trends.

Among the jurisdictions submitting Committed Land data, a total of 205,746 acres are slated for nonagricultural uses in the future (Table 7). Of these lands, 14 percent (29,764 acres) are currently mapped as Prime Farmland by FMMP, and 21 percent (43,693) are within other irrigated categories. Approximately 79 percent of the Committed Land (162,053 acres) is currently mapped as Farmland of Local Importance, Nonirrigated, Grazing Land, and Other Land.

These figures represent an 11 percent increase in Committed Land compared to those reported from the 1996 period. Committed Land located on Prime Farmland decreased by 6 percent over the previous reporting period, and overall irrigated farmland identified as Committed Land use declined by 5 percent.

TABLE 7
LAND COMMITTED TO NONAGRICULTURAL USE

LAND COMMITTED TO NONAGRICULTURAL USE	1996 DATA		1998 DATA	
	ACRES	PERCENT	ACRES	PERCENT
FROM PRIME FARMLAND	31,748	17%	29,764	14%
FROM STATEWIDE, UNIQUE, IRRIGATED	14,294	8%	13,929	7%
FROM ALL IRRIGATED CATEGORIES	46,042	25%	43,693	21%
FROM OTHER LAND	50,845	28%	50,869	25%
FROM LOCAL, NON-IRRIGATED, GRAZING	87,701	47%	111,184	54%
TOTAL COMMITTED LAND	184,588	100%	205,746	100%

Note to Reader:

Information on Land Committed to Nonagricultural Use is provided on a voluntary basis by cities and counties. Figures represent a cumulative total of all land reported as "Committed" minus those acres developed subsequent to reporting.

Figure 9.
Counties With Most Land Committed
to Nonagricultural Use

